

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A display device comprising:
a display section configured and arranged to display an image within a display region of a non-head mounted display screen;
a motion detecting section configured and arranged to detect a movement of the display section;
an image displacement computing section configured to compute a translational displacement of the display section based on the movement of the display section; ~~and~~
a viewer motion determining section configured and arranged to determine a viewer motion value that is indicative of a movement of a head portion of a viewer watching the display section;
a relative displacement computing section configured to compute a relative displacement between the display section and the head portion of the viewer based on the translational displacement of the display section computed by the image displacement computing section and the viewer motion value of the head portion of the viewer determined by the viewer motion determining section; and
a display control section configured to adjust a display position of the image within the display region of the display section based ~~at least on the translational displacement of the display section~~ on the relative displacement.

2. (Currently Amended) The display device as recited in claim 1, wherein the display section is configured and arranged to be fixedly coupled to a vehicle to display the image to a ~~passenger~~ the viewer inside the vehicle, and the motion detecting section is further configured and arranged to detect the movement of the display section by detecting a movement of the vehicle.

3. (Currently Amended) The display device as recited in claim 2, wherein the display control section is further configured to shift the image by an amount based on the relative displacement ~~that substantially cancels the translational displacement of the display section~~ to stabilize the image to the viewer.

4. (Canceled).

5. (Currently Amended) The display device as recited in ~~claim 4~~ claim 2, further comprising

a head motion detecting section configured and arranged to detect the movement of the head portion of the ~~passenger~~ viewer,

the ~~passenger~~ viewer motion determining section being further configured and arranged to determine the ~~passenger~~ viewer motion value based on a detection result from the head motion detecting section.

6. (Currently Amended) The display device as recited in ~~claim 4~~ claim 2, wherein

the ~~passenger~~ viewer determining section is further configured and arranged to determine the ~~passenger~~ viewer motion value based on at least one of a response function of vibration of a human body corresponding to the ~~passenger~~ viewer in response to the movement of the vehicle and a numerical model indicative of the vibration of the human body in response to the movement of the vehicle.

7. (Currently Amended) The display device as recited in claim 6, wherein the ~~passenger~~ viewer motion determining section is further configured and arranged to determine the ~~passenger~~ viewer motion value using a physique and a sitting posture of the ~~passenger~~ viewer as an estimate parameter.

8. (Currently Amended) The display device as recited in claim 6, wherein the viewer motion determining section is further configured and arranged to select the response function of the vibration of the human body corresponding to a physique and a sitting posture of the ~~passenger~~ viewer estimated based on a distribution of a body pressure on a seat on which the ~~passenger~~ viewer is sitting.

9. (Currently Amended) The A display device as recited in ~~claim 2~~, further comprising:

a display section configured and arranged to display an image within a display region of a non-head mounted display screen, the display section being configured and arranged to be fixedly coupled to a vehicle to display the image to a passenger inside the vehicle;

a motion detecting section configured and arranged to detect a movement of the display section by detecting a movement of the vehicle;

an image displacement computing section configured to compute a translational displacement of the display section based on the movement of the display section;

a center deviation computing section configured and arranged to compute a center deviation between a center of the image and a center of the display region of the display section based on a translated position of the display section; and ,

a display control section configured to adjust a display position of the image within the display region of the display section based simultaneously on the translational displacement of the display section and the display control section being further configured and arranged to display the image on the display section such that the center deviation is canceled.

10. (Original) The display device as recited in claim 9, wherein the center deviation computing section is further configured and arranged to set the center of the image using an average position of centers of a plurality of images consecutively displayed in the display section within a prescribed period of time and repeat computing the center deviation not faster than once every three seconds.

11. (Currently Amended) ~~The~~ A display device comprising: as recited in claim 9,
~~further configured~~

a display section configured and arranged to display an image within a display region of a non-head mounted display screen, the display section being configured and arranged to be fixedly coupled to a vehicle to display the image to a passenger inside the vehicle;

a motion detecting section configured and arranged to detect a movement of the display section by detecting a movement of the vehicle;

an image displacement computing section configured to compute a translational displacement of the display section based on the movement of the display section;

an acceleration/deceleration operation determining section configured and arranged to determine whether the vehicle is accelerating or decelerating, and

a center deviation computing section configured and arranged to compute a center deviation between a center of the image and a center of the display region of the display section, the center deviation computing section being further configured and arranged to stop computing the center deviation upon determining that the vehicle is accelerating or decelerating;

a display control section configured to adjust a display position of the image within the display region of the display section based on the translational displacement of the display section and the center deviation.

12. (Original) The display device as recited in claim 11, wherein the acceleration/deceleration operation determining section is further configured and arranged to determine whether the vehicle is accelerating or decelerating by detecting at least one of an accelerator pedal operation, a steering operation and a vehicle motion.

13. (Original) The display device as recited in claim 10, wherein an acceleration/deceleration operation determining section configured and arranged to determine whether the vehicle is accelerating or decelerating,

the center deviation computing section being further configured and arranged to stop computing the center deviation when it is determined that the vehicle is accelerating or decelerating.

14. (Original) The display device as recited in claim 13, wherein the acceleration/deceleration operation determining section is further configured and arranged to determine whether the vehicle is accelerating or decelerating by detecting at least one of an accelerator pedal operation, a steering operation and a vehicle motion.

15. (Currently Amended) ~~The A display device as recited in claim 2, further~~ comprising:

a display section configured and arranged to display an image within a display region of a non-head mounted display screen the display section being configured and arranged to be fixedly coupled to a vehicle to display the image to a passenger inside the vehicle;

a motion detecting section configured and arranged to detect a movement of the display section by detecting a movement of the vehicle;

an image displacement computing section configured to compute a translational displacement of the display section based on the movement of the display section;

a display control section configured to adjust a display position of the image within the display region of the display section based at least on the translational displacement of the display section; and

an acceleration/deceleration operation determining section configured and arranged to determine whether the vehicle is accelerating or decelerating,

the image displacement computing section being further configured to compute the translational displacement divided into a low frequency displacement which is not detectable by the passenger when the vehicle travels at a constant speed and a high frequency displacement which is detectable by the passenger when the vehicle travels at a constant speed,

the display control section being further configured to adjust the display position of the image within the display region of the display section based on the low frequency displacement and the high frequency displacement when the vehicle is accelerating or decelerating and based on the high frequency displacement when the vehicle is not accelerating or decelerating.

16. (Currently Amended) The display device as recited in ~~claim 4~~ claim 15, further comprising

a center deviation computing section configured and arranged to compute a center deviation between a center of the image and a center of a display region of the display section,

the display control section being further configured and arranged to ~~display~~ shift the image on the display section ~~such that based on the center deviation is canceled~~.

17. (Original) The display device as recited in claim 1, wherein the display section, the motion detecting section, the image displacement computing section and display control section are configured and arranged to be part of a portable, hand held device.

18. (Currently Amended) The display device as recited in claim 17, wherein the display control section is further configured to shift the image by an amount ~~that substantially cancels the translational displacement of the display section based on the~~ relative displacement to stabilize the image to the viewer.

19. (Currently Amended) A display device comprising:
display means for displaying an image within a display region;
~~motion detecting~~ means for detecting a movement of the display means;
~~image displacement computing~~ means for computing a translational displacement of the display means based on the movement of the display means; ~~and~~
means for determining a viewer motion value that is indicative of a movement of a head portion of a viewer watching the display section;
means for computing a relative displacement between the display section and the head portion of the viewer based on the translational displacement of the display section computed by the image displacement computing means and the viewer motion value of the head portion of the viewer determined by the viewer motion determining means; and
~~display control section~~ means for adjusting a display position of the image within the display region of the display means based ~~at least on the translational displacement of the display means~~ on the relative displacement.

20. (Currently Amended) A method comprising:
displaying an image within a display region of a display device;
detecting a movement of the display device;

computing a translational displacement of the display device based on the movement of the display device; and

determining a viewer motion value that is indicative of a movement of a head portion of a viewer watching the display section;

computing a relative displacement between the display section and the head portion of the viewer based on the translational displacement of the display section and the viewer motion value of the head portion of the viewer; and

adjusting a display position of the image within the display region of the display device based ~~at least on the translational displacement of the display device~~ on the relative displacement.